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ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18
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Title of Invention

PREAPPLIABLE PHASE CHANGE THERMAL INTERFACE PAD

Application Number:

10/643401

Confirmation Number:

3992

First Named Applicant:

RAYMOND FREULER

Attorney Docket Number: POWRD-015C

Art Unit:

1772

Examiner:

BRIAN P. EGAN P. Nordmeyer

Search string:

(2887628 or 2799793 or 3013104 or 3249680 or 3356828 or 3391242 or 3463140 or 3463161 or 3467547 or 3476177 or 3586102 or 3603106 or 3819530 or 3823089 or 3887628 or 3972821 or 4065908 or 4151547 or 4199548 or 4237086 or 4266267 or 4299715 or 4360626 or 4666483 or 4473113 or 4489487 or 5002715 or 5237086 or 5904796 or 5912805 or 5930893 or 5931831

or 5986884 or 6391442).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
700	_ 1	2887628	1956-06-12	ZIERDT, JR.			_
	2	2799793	1957-07-16	DE CAIN			
	3	3013104	1961-12-12	YOUNG			
	4	3249680	1966-05-02	SHEETS, ET AL.			
	5	3356828	1967-12-05	FURNESS			
	6	3391242	1968-07-02	SUDGES			
	7	3463140	1969-08-26	ROLLOR, JR.			
	8	3463161	1969-08-26	ANDRASSY			
	9	3467547	1969-08-16	HARVEY, ET AL.			
	10	3476177	1969-11-04	POTZI			
\Box	11	3586102	1971-06-22	GILLES			
pe	12	3603106	1971-09-07	RYAN			

l		/ L		·
Pa	_ 13	3819530	1974-06-25	RATLEDGE ET AL.
	14	3823089	1974-07-09	RYAN ET AL.
	15	3887628	1975-06-03	BECKERS
	16	3972821	1976-08-03	WEIDENBENNER ET AL.
	17	4065908	1978-01-03	MUELLER
	18	4151547	1979-04-24	RHOADES ET AL.
	19	4199548	1980-04-22	RAIHO, ET AL.
	20	4237086	1980-12-02	GEHLE
	21	4266267	1981-05-05	RUEGG
	22	4299715	1981-11-10	WHITFIELD ET AL.
	23	4360626	1982-11-23	MANWILLER
	24	4666483	1984-08-21	WHITFIELD ET AL.
	25	4473113	1984-08-25	WHITFIELD ET AL.
	26	4489487	1984-12-25	BURA
	27	5002715	1991-03-26	FEINBERG ET AL.
	28	5237086	1993-08-17	KRUGER ET AL
	29	5904796	1999-05-18	FREULER ET AL.
	30	5912805	1999-06-15	FREULER ET AL.
Ш	31	5930893	1999-08-03	EATON
Щ	32	5931831	1999-08-03	LINDER
Ш	33	5986884	1999-11-16	JAIRAZBHOY ET AL.
	34	6391442	2002-05-21	DUVALL ET AL.

Signature

Examiner Name	Date
Total J. Nordmuse	5/20/05

PTO/SB/08A (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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of

C mplete if Known 10/643.401 **Application Number** Filing Date 08/19/2003 First Named Inventor RAYMOND FREULER Art Unit 1772 B.P. EGAN P. Nordmeyes Examiner Name Attorney Docket Number POWRD-015C

			U.S. PAT	ENT DOCUMENTS	
Examiner Initials*	Cite No. 1	Document Number Number - Kind Code 2 (if Innown)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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		FOR	EIGN PATENT D	OCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code 3 - Number 4 - Kind Code 8 (Farrown)	Publication Data MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Retavant Passages or Relavant Figures Appear	τ°
plu		CA 600,823	06-28-1960	R. DE BUDA		
plu		GB 1,086,003	10-25-1967	W. SINCLAIR		
polin		FR 2,368,529	10-20-1976	P. BLANIE		Н
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Examiner Fatherin J. Mandiners	Date Considered	5/20/05	

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С	mplete if Known
Application Number	10/643.401
Filing Dat	08/19/2003
First Named Inventor	RAYMOND FREULER
Group, Art Unit	1772
Examiner Name	B.P. EGAN P. Nordmeren
Attorney Docket Number	POWRD-015C

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2
plu		POWER DEVICES, INC.; "Kapton MT Substrate Coated with High Performance Thermal Compound in Easy-to-Use Form"; MCM-Strate; 1996	
, 		POWER DEVICES, INC.; "Low Thermal Resistance and Excellent Electrical Insulation in One Clean, Reliable System"; ISOSTRATE; (Not Dated).	
		POWER DEVICES, INC.; "Adhesive-backed Aluminum Substrate with High Performance Thermal Compound in Easy-to-Use Form; MCM-STRATE; 1996	
		POWER DEVICES, INC.; "The Cost-Effective Solution to Thermal Interface Problems - Clean, Dry and Easy to Use"; THERMSTRATE; (Not Dated).	
		CHOMERICS; "THERMATTACH 404 AND 405 Thermally Conductive Adhesive Tapes"; CHO-THERM Thermal Interface Materials; Technical Bulletin 72; 1993	
		CHOMERICS; "THERMATTACH T413 AND T414 Thermally Conductive Adhesive Tapes"; Preliminary Product Data Sheet; 1994	Ŀ
		CHOMERICS; "THERMFLOW T705 and T710 Low Thermal Resistance Interface Pads"; CHO-THERM Thermal Interface Material; Technical Bulletin 77; 1997	
		THE BERGQUIST COMPANY; "SIL-PAD Design Guied"; Spring 1993	
plu	<u> </u>	Print out from www.dupont.com website: "Thermal Properties of Elvax Measured by Differential Scanning Calorimeter (DSC)"; 1997	Ŀ
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Signature Latine 2. Horlineyer	Date Considered	5/20/05	

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